

Patent Claims

1. Process for respiratory support for a patient, wherein the patient's spontaneous respiration is recorded by sensors, and an additional quantity of oxygen is administered to the lung at the end of an inhalation process.
2. Process as per patent claim 1, wherein the oxygen quantity has a volume of 25 ml to 150 ml.
3. Process as per patent claim 1 or 2, wherein the patient's exhalation process is slowed by a counter-flow.
4. Arrangement for respiratory support to a patient, including an oxygen pump (1) to be connected to an oxygen supply, as well as an airway prosthesis (2, 3), to be connected via a catheter (5), wherein sensors (8, 9) are intended to record the patient's spontaneous respiration, same sensors being connected with a control unit (12) to activate the oxygen pump (1), and the airway prosthesis (2, 3) possesses a tubular support body (6) with a connector (7) for the catheter (5), wherein two of the sensors (8, 9) are assigned to the support body (6).
5. Arrangement as per patent claim 4, in which a sensor (8) is placed against the interior wall (10) of the support body (6).
6. Arrangement as per patent claim 4 or 5, wherein the end (15) of the catheter (5) which is located within the support body (6) is redirected so as to be approximately parallel to its longitudinal axis (L), as well as being provided with a jet nozzle at its end.
7. Arrangement as per one of the patent claims 4 to 6 in which the oxygen pump (1) consists of a piston pump.
8. Arrangement as per one of the patent claims 4 to 7, in which the catheter is provided with a double lumen.
9. Arrangement as per one of the patent claims 4 to 8, wherein further respiratory sensors (13, 14) are intended in addition to the sensors (8, 9).

10. Airway prosthesis possessing a tubular support body (6) with a connector (7) for a jet catheter (5), wherein the support body (6) includes at least two sensors (8, 9).
11. Airway prosthesis as per patent claim 10, wherein a sensor (8) is affixed to the internal wall (10) of the support body (6).
12. Airway prosthesis as per patent claim 10 or 11, wherein the catheter end (15) within the support body (6) is directed so as to be parallel to its longitudinal axis (L).
13. Catheter as a tubular instrument to one of whose ends (31) at least one sensor (32, 33) is affixed.
14. Catheter as per patent claim 13 in which the end (31) possesses a jet nozzle (35).
15. Catheter as per patent claim 13 or 14, wherein the end (31) is bent.

ILLUSTRATION KEY:

Inspiratorischer Fluss – inspiratorial flow

Inspiratorische Atemunterstützung – inspiratorial respiratory support

Expiratorischer Fluss – expiratorial flow

Expiratorische Flussbremse zur Kollapsverhinderung – expiratorial flow brake to prevent collapse

Emphysempatient – emphysema patient

Ohne – without

Mit Gerät – with the device

Ein – in